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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,018	02/16/2001	Claudio De Girolamo	Q63003	1611

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EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,018

Applicant(s)

DE GIROLAMO ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-16-01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claims 1, 2, 7, 9, and 11 are objected to because of the following informalities:

Claim 1, line 6; and claim 2, line 1 state "wherein it..." Since "it" is a general term
5 and applicant is not necessarily clear as to what "it" refers, it is suggested that "wherein
it..." be changed to --wherein the method...--, as this is assumed to be what applicant
means by "it".

Claim 7, line 1 states "wherein it..." As with claims 1 and 2, "it" is not clear as to
what "it" is referring to. Therefore, it is suggested that "wherein it..." be changed to
10 --wherein the network element...--, as this is assumed to be what applicant means by
"it".

Claim 9, line 5 states "wherein it..." Again, it is unclear what "it" is referring to.
Therefore, it is suggested applicant change "wherein it..." to --wherein the network...--.

Claim 11, line 1 states "wherein it..." As with claims 1, 2, 7, and 9 "it" is unclear.
15 Therefore, "wherein it..." should be changed to --wherein the MS-SPRING protocol...--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

20 The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

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Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, lines 4 and 6; claim 7, line 1; and claim 8, line 8 state "said
5 network elements", "the network element", or "a network element". It is unclear which network element(s) any of the above are referring to. The reason being that independent claim 6 discloses "a network element" in the preamble and then "at least two...network elements" in the body of the claim. Since it is not entirely clear if these network elements consist of the same type of element or if they are separate elements
10 or if they are even related to one another, it is impossible to ascertain which are being referred to in the above mentioned lines. Clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
15 form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

20 (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

25 Claims 1, 6, 9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Badr (U.S. Patent 6,567,194 B1).

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Regarding claim 1, Badr discloses “a method for protecting traffic in a fiber-optic telecommunications network, said method comprising the steps of:

providing at least two nodes or network elements (figure 1B shows two provided network elements 12 and 12A);

5 providing at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration (figure 1B where lines 14₁ and 14₂ represent at least one working path and a protection path as read in col. 4, lines 51-54; further although the ring of figure 1B appears to be a closed loop, with the failure of the lines between the elements 12 and 12A the ring is by definition an open-ring
10 configuration, see applicant’s specification, page 4, “Best Mode...” section, first paragraph, lines 4-8), said at least one fiber optic span comprising working fiber and protection fiber (col. 4, lines 51-54), wherein [the method] further includes the step of providing the network with an MS-SPRING shared protection mechanism for closed ring networks (col. 2, lines 15-19 and 28-59).”

15

The network elements in claims 6-8 are assumed to be part of the same ring.

Regarding claim 6, Badr discloses “a network element for a fiber-optic telecommunications network, said network comprising:

at least two nodes or network elements (figure 1B shows two provided network
20 elements 12 and 12A);

at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration (figure 1B where lines 14₁ and 14₂ represent at least

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one working path and a protection path as read in col. 4, lines 51-54; further although the ring of figure 1B appears to be a closed loop, with the failure of the lines between the elements 12 and 12A the ring is by definition an open-ring configuration, see applicant's specification, page 4, "Best Mode..." section, first paragraph, lines 4-8), said
5 at least one fiber optic span comprising working fiber and protection fiber (col. 4, lines 51-54), wherein the network element is managed by an MS-SPRING shared protection mechanism for closed ring networks (col. 2, lines 15-19 and 28-59)."

Regarding claim 9, Badr discloses "a fiber-optic telecommunications network,

10 said network comprising:

at least two nodes or network elements (figure 1B shows two provided network elements 12 and 12A);

at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration (figure 1B where lines 14₁ and 14₂ represent at least
15 one working path and a protection path as read in col. 4, lines 51-54; further although the ring of figure 1B appears to be a closed loop, with the failure of the lines between the elements 12 and 12A the ring is by definition an open-ring configuration, see applicant's specification, page 4, "Best Mode..." section, first paragraph, lines 4-8), said
20 at least one fiber optic span comprising working fiber and protection fiber (col. 4, lines 51-54), wherein [the network] further comprises an MS-SPRING shared protection mechanism for closed ring networks (col. 2, lines 15-19 and 28-59)."

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Regarding claim 11, Badr discloses "the use of an MS-SPRING protocol for a fiber-optic closed ring network, wherein [the MS-SPRING protocol] is used for a network comprising;

at least two nodes or network elements (figure 1B shows two provided network elements 12 and 12A); and

at least one corresponding fiber optic span connecting said network elements in a linear or open-ring configuration (figure 1B where lines 14₁ and 14₂ represent at least one working path and a protection path as read in col. 4, lines 51-54; further although the ring of figure 1B appears to be a closed loop, with the failure of the lines between the elements 12 and 12A the ring is by definition an open-ring configuration, see applicant's specification, page 4, "Best Mode..." section, first paragraph, lines 4-8)."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Badr.

Regarding claims 12 and 13, Badr discloses the method of claim 1. However, Badr does not explicitly disclose that the method is executed or implemented on a

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computer readable medium consisting of a program to execute the method. Although Badr does not disclose a computer readable medium with such a program, it would have been obvious to one with ordinary skill in the art at the time of invention to have a computer execute the method of claim 1. The motivation for executing a method relating
5 to the electronic/optical arts is that the invention would not be feasible if it were implemented in any other way besides a computer, executing the method by computer imparts speed and reliability in the execution of the method.

Claims 2-5, 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being
10 unpatentable over Badr in view of Chapman (U.S. Patent 5,974,027).

Regarding claims 2, 7, and 10 Badr discloses the method of claim 1 and the networks of claims 6 and 9. However, Badr lacks what Chapman discloses, "instructions to disregard any ring command or failure coming from other network elements of the
15 same network (col. 4, lines 6-15 where it is suggested that the switch request can consist of any of the commands from the list of table 1, including the "Lockout of protection" command which is defined in col. 3, lines 54-58, whereby preventing others from accessing the protection ring, the nodes are in effect disregarding any commands, including other failure messages)." It would have been obvious to one with ordinary skill
20 in the art at the time of invention to have the "lockout protection" command for the purpose of ensuring that no other nodes can access the protection ring. The motivation for not allowing any other nodes to access the protection ring is so that the highest

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priority node (or data) is able to use the protection ring for its communication and highly important information is not lost due to the unavailability of a transmission path.

Regarding claim 3, Badr and Chapman disclose the method of claim 2. However,

5 Badr lacks what Chapman further discloses, "the step of instructing said at least two nodes of the network so that they disregard any ring command or failure comprises the step of imparting a Lockout of Working Channels-Ring command to said at least two nodes of the network (col. 4, lines 6-15 where the "Lockout of protection" command is equivalent to the "Lockout of Working Channels-Ring" command as they both prevent
10 other channels (nodes) from using the protection ring)." It would have been obvious to one with ordinary skill in the art to have a "lockout of working channels-ring" command for the same reasons and motivation as in claim 2.

Regarding claims 4 and 5, Badr and Chapman disclose the methods of claim 3
15 and claim 2 and further discloses "the nodes of said network having a linear configuration comprise a first and a second end nodes (Badr, figure 1B shows two nodes 12 and 12A)..." However, Badr lacks what Chapman further discloses, "...the method comprises the further steps of: connecting said end nodes by means of one or more fiber optic spans so as to obtain a closed-ring network (col. 6, lines 37-40 where
20 the recovery of the failed path means that the end nodes of the open-ring network are now connected and form a closed-ring network); and removing the instruction to disregard any ring command or failure from all the nodes of the former open-ring

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network (col. 6, lines 41-44 where the “no request” allows normal communication to resume and the “lockout protection” is dropped).” It would have been obvious to one with ordinary skill in the art to include the connecting of the end nodes with the dropping of the lockout command for the purpose of allowing normal communication to resume.

- 5 The motivation for letting normal communication to resume is that the highest priority data is no longer using all the communication resources and all nodes, regardless or priority, can use the network.

- Regarding claim 8, Badr and Chapman disclose the network of claim 7. However,
- 10 Badr lacks what Chapman further discloses, “the instruction to disregard any ring command or failure is removed should said linear network be closed with one or more spans to close it in a ring configuration (col. 6, lines 37-44 whereby recovering the path the end nodes are now connected thus creating a closed-ring network and the “lockout protection” command is dropped, as per the “no request” command, and normal
- 15 communication can resume).” It would have been obvious to one with ordinary skill in the art to include the connecting of the end nodes with the dropping of the lockout command for the purpose of allowing normal communication to resume. The motivation for letting normal communication to resume is that the highest priority data is no longer using all the communication resources and all nodes, regardless or priority, can use the
- 20 network.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

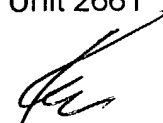
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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joshua Kading
Examiner
Art Unit 2661

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August 6, 2004


KENNETH VANDERPUYE
PRIMARY EXAMINER